

## CLAIMS

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A/S*

1. Mechanical transmission, comprising:  
- a frame;  
- an input shaft with a first friction surface,  
which shaft is arranged rotatably on the frame;

5 - an output shaft with a second friction  
surface arranged rotatably on the frame parallel to the  
input shaft;

- a rotatable body with a third and a fourth  
friction surface arranged at least for radial

10 displacement on the frame between the input and output  
shaft;

- a first push belt arranged between the first  
and the third friction surface and co-acting therewith;  
and

15 - a second push belt arranged between the  
second and the fourth friction surface and co-acting  
therewith,

wherein the friction surfaces are rotation-  
symmetrical, the friction surfaces comprise at least an  
20 axial component and at least one of the first and the  
third friction surface and at least one of the second and  
the fourth friction surface comprise a radial directional  
component.

2. Transmission as claimed in claim 1,  
25 characterized in that

the input and output shaft each comprise a  
wheel with a bowl-shaped surface such that the conical  
surfaces form respectively the first and the second  
friction surface, and that the body comprises on either  
30 side two wheel-shaped recesses coaxial to the rotation  
axis such that the cylindrical surfaces form respectively  
the third and the fourth friction surface.

3. Transmission as claimed in claim 1,

characterized in that

the input and the output shaft each comprise a wheel with a coaxial wheel-shaped recess such that the cylindrical surfaces of the recesses form respectively the first and the second surface, and that the body comprises on either side a bowl-shaped surface such that the two conical surfaces form respectively the third and the fourth friction surface.

4. Transmission as claimed in claim 2 or 3,

10 characterized in that

the diameters of both wheel-shaped recesses differ from each other.

5. Transmission as claimed in any of the claims 2, 3 or 4,

15 characterized in that

a stabilization part is arranged in the wheel-shaped recess, which part extends in radial direction as far as the push belt arranged in the recess.

6. Transmission as claimed in claim 1,

20 characterized in that

the push belt comprises a number of mutually abutting push links.

7. Transmission as claimed in claim 1,

characterized in that

25 the push belt comprises a flexible belt.

8. Transmission as claimed in claim 1,

characterized in that

30 the first and the second friction surface are identical and the third and the fourth friction surface are identical.

9. Transmission as claimed in claim 8 and 2, 3 or 4,

characterized in that

35 the bowl-shaped surfaces are conical surfaces.

10. Mechanical transmission, comprising:

- a frame;

- an input shaft with a first friction surface, which shaft is arranged rotatably on the frame;

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- a translatable arranged body with a second friction surface;
- a rotatable body with a third and a fourth friction surface arranged at least for radial displacement on the frame between the input shaft and the translatable body;
- 5 - a first push belt arranged between the first and the third friction surface and co-acting therewith; and
- 10 - a second push belt arranged between the second and the fourth friction surface and co-acting therewith,
  - wherein the first, third and fourth friction surfaces are rotation-symmetrical, the friction surfaces comprise at least an axial component and at least one of the first and the third friction surface and at least one of the second and the fourth friction surface comprise a radial directional component.
- 15 11. Transmission as claimed in any of the foregoing claims,
  - characterized in that
  - at least one push belt is manufactured from stainless steel material, hard material or ceramic material.
- 20 25 12. Transmission as claimed in claim 11,
  - characterized in that
  - the friction surface associated with the at least one push belt is a steel surface.
- 30 13. Transmission as claimed in claim 11 or 12,
  - characterized by
  - cooling means for cooling at least one push belt with a cooling liquid such as water.